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FEB 19 2008

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1-3. (canceled)

4. (currently amended) ~~The method of claim 1~~ A method for preventing islanding in a power system that includes a power grid having a feeder connected in circuit with a distributed generator and at least one load, said method comprising:

determining a phase shift of a voltage based solely on sequential frequency measurements at an output of said distributed generator;

comparing said phase shift to a threshold phase shift that signifies a phase shift due to a disconnect of said grid from said feeder; and

if said phase shift is greater than said threshold phase shift, issuing a command for a disconnect of said distributed generator from said feeder, wherein said phase shift is determined by:

$$\theta_n = 2\pi \cdot (1 - \frac{f_{n-1}}{f_n}) \quad ,$$

where θ_n is said phase shift and f_n and f_{n-1} are the frequencies at a current zero-crossing and a previous zero-crossing of said voltage, respectively.

5. (currently amended) ~~The method of claim 1~~ A method for preventing islanding in a power system that includes a power grid having a feeder connected in circuit with a distributed generator and at least one load, said method comprising:

determining a phase shift of a voltage based solely on sequential frequency measurements at an output of said distributed generator;

comparing said phase shift to a threshold phase shift that signifies a phase shift due to a disconnect of said grid from said feeder; and

if said phase shift is greater than said threshold phase shift, issuing a command for a disconnect of said distributed generator from said feeder, wherein said phase shift is determined by:

$$\theta_{total} = \theta_{n-2} + \theta_{n-1} + \theta_n = 2\pi \cdot (3 - \frac{f_{n-3}}{f_{n-2}} - \frac{f_{n-2}}{f_{n-1}} - \frac{f_{n-1}}{f_n}) \quad ,$$

where θ_{total} is said phase shift, θ_n, θ_{n-1}, and θ_{n-2}, are the current, the first previous and the second previous phase shifts, respectively, and f_n, f_{n-1}, f_{n-2}, f_{n-3}, are the frequencies at a current, a first previous, a second previous and a third previous zero-crossing of said voltage, respectively.

6-8. (canceled)

9. (currently amended) ~~The controller of claim 6~~ A controller for preventing islanding in a power system that includes a power grid having a feeder connected in circuit with a distributed generator and at least one load, said controller comprising:

a processor, a memory and an input/output unit, wherein said memory includes a grid disconnect program that causes said processor to perform the operations of:

determining a phase shift of a voltage based solely on sequential frequency measurements at an output of said distributed generator;

comparing said phase shift to a threshold phase shift that signifies a phase shift due to a disconnect of said grid from said feeder; and

if said phase shift is greater than said threshold phase shift, issuing a command for a disconnect of said distributed generator from said feeder, wherein said phase shift is determined by:

$$\theta_n = 2\pi \cdot (1 - \frac{f_{n-1}}{f_n}) \quad ,$$

where θ_n is said phase shift and f_n and f_{n-1} are the frequencies at a current zero-crossing and a previous zero-crossing of said voltage, respectively.

10. (currently amended) ~~The controller of claim 6~~ A controller for preventing islanding in a power system that includes a power grid having a feeder connected in circuit with a distributed generator and at least one load, said controller comprising:

a processor, a memory and an input/output unit, wherein said memory includes a grid disconnect program that causes said processor to perform the operations of:

determining a phase shift of a voltage based solely on sequential frequency measurements at an output of said distributed generator;

comparing said phase shift to a threshold phase shift that signifies a phase shift due to a disconnect of said grid from said feeder; and

if said phase shift is greater than said threshold phase shift, issuing a command for a disconnect of said distributed generator from said feeder, wherein said phase shift is determined by:

$$\theta_{total} = \theta_{n-2} + \theta_{n-1} + \theta_n = 2\pi \cdot (3 - \frac{f_{n-3}}{f_{n-2}} - \frac{f_{n-2}}{f_{n-1}} - \frac{f_{n-1}}{f_n}) \quad ,$$

where θ_{total} is said phase shift, θ_n, θ_{n-1}, and θ_{n-2}, are the current, the first previous and the second previous phase shifts, respectively, and f_n, f_{n-1}, f_{n-2}, f_{n-3}, are the frequencies at a current, a first previous, a second previous and a third previous zero-crossing of said voltage, respectively.

11-13. (canceled)

14. (currently amended) ~~The memory media of claim 11~~ A memory media for a controller for preventing islanding in a power system that includes a power grid having a feeder connected in circuit with a distributed generator and at least one load, said controller comprising a processor, a memory and an input/output unit, said memory media comprising a grid disconnect detection program that causes said processor to perform the operations of:

determining a phase shift of a voltage based solely on ~~consecutive~~ sequential frequency measurements ~~over multiple periods of time~~ at an output of said distributed generator;

comparing said phase shift to a threshold phase shift that signifies a phase shift due to a disconnect of said grid from said feeder; and

if said phase shift is greater than said threshold phase shift, issuing a command for a disconnect of said distributed generator from said feeder, wherein said phase shift is determined by:

$$\theta_n = 2\pi \cdot (1 - \frac{f_{n-1}}{f_n}) \quad ,$$

where θ_n is said phase shift and f_n and f_{n-1} are the frequencies at a current zero-crossing and a previous zero-crossing of said voltage, respectively.

15. (currently amended) ~~The memory media of claim 11~~ A memory media for a controller for preventing islanding in a power system that includes a power grid having a feeder connected in circuit with a distributed generator and at least one load, said controller comprising a processor, a memory and an input/output unit, said memory media comprising a grid disconnect detection program that causes said processor to perform the operations of:

determining a phase shift of a voltage based solely on sequential frequency measurements at an output of said distributed generator;

comparing said phase shift to a threshold phase shift that signifies a phase shift due to a disconnect of said grid from said feeder; and

if said phase shift is greater than said threshold phase shift, issuing a command for a disconnect of said distributed generator from said feeder, wherein said phase shift is determined by:

$$\theta_{total} = \theta_{n-2} + \theta_{n-1} + \theta_n = 2\pi \cdot (3 - \frac{f_{n-3}}{f_{n-2}} - \frac{f_{n-2}}{f_{n-1}} - \frac{f_{n-1}}{f_n}) \quad ,$$

where θ_{total} is said phase shift, θ_n, θ_{n-1}, and θ_{n-2}, are the current, the first previous and the second previous phase shifts, respectively, and f_n, f_{n-1}, f_{n-2}, f_{n-3}, are the frequencies at a

current, a first previous, a second previous and a third previous zero-crossing of said voltage, respectively.

16. (canceled)